## STATEMENT OF CONSIDERATIONS

REQUEST BY GE CORPORATE RESEARCH & DEVELOPMENT (GE-CRD) FOR AN ADVANCE WAIVER OF DOMESTIC AND FOREIGN PATENT RIGHTS UNDER DOE COOPERATIVE AGREEMENT NO. DE-FC07-96ID13406; W(A)-96-004; CH-0894

The Petitioner, GE Corporate Research & Development (GE-CRD) has requested a waiver of domestic and foreign patent rights for all subject inventions arising from its participation under the above referenced cooperative agreement entitled "Electric Vehicle Program - Ultracapacitor/Battery Electronic Interface Project."

The objective of the cooperative agreement is to develop prototype electronic interface hardware to verify the design of the power electronics and basic control strategy for an advanced electric vehicle drive line that uses ultracapacitors to load level the main storage battery. The work includes a system study and preliminary design to establish the specification, performance goal and configuration of a highly efficient 25 kW prototype ultracapacitor/battery interface circuit. Next, after performing a detailed hardware/software design analysis, a 25 kW softswitching power electronic circuit with associated controls will be fabricated. Finally, laboratory test and evaluation of the interface circuit will be conducted at both the GE-CRD laboratory and INEEL.

The total anticipated cost of the cooperative agreement, as amended, is \$484,294 with the Petitioner's share being \$241,272, for approximately 50% cost sharing. The waiver is contingent upon the Petitioner maintaining the above cost sharing percentage until completion of the agreement.

As noted in its waiver petition, Petitioner has had a long history of R&D in the field of advanced electric drive systems and hold key patents in this field. Petitioner has extensive experience in electric vehicle propulsion systems and has participated in numerous government sponsored electric vehicle research programs while providing significant cost sharing. In the last three such programs, Petitioner has cost shared approximately \$1,000,000 in electric vehicle drive and power train research programs. Total electric and hybrid vehicle projects undertaken by Petitioner total over \$37 million during the last 15 years. Considering Petitioner's technical expertise, established market position, and significant investment in this technology including sizable cost sharing in this cooperative agreement, it is reasonable to conclude that Petitioner will continue to develop and ultimately commercialize the technology and products which may arise from this cooperative agreement.

Petitioner has agreed that this waiver shall be subject to the march-in and preference for U.S. industry provisions, as well as the U.S. Government license, comparable to those set out in 35 U.S.C. 202-204. Further, Petitioner has agreed to the U.S. competitiveness provisions as attached to this Statement. In brief, Petitioner has agreed that products embodying any waived

invention or produced through the use of any waived invention will be manufactured substantially in the United States unless Petitioner can show to the satisfaction of the DOE that it is not commercially feasible to do so, and that Petitioner will not license, assign or otherwise transfer any waived invention to any entity unless that entity agrees to these same requirements.

Referring to item 10 of the waiver petition, granting this waiver is not anticipated to have any adverse impact on competition. There are currently numerous competing designs, as well as competitors, in the field of electric drive technology. Other companies are undertaking similar research in the field and some with similar support from the Government. The success of this cooperative agreement can be expected to further the infusion of new electric drive technology and increase competition in the field by spurring similar research.

Considering the foregoing, it is believed that granting this waiver will provide Petitioner with the necessary incentive to invest its resources in the commercialization of the results of the cooperative agreement in a fashion which will make the above technology available to the public in the shortest practicable time. Therefore, upon evaluation of the waiver petition and in view of the objectives and considerations set forth in 10 CFR Part 784, all of which have been considered, it is recommended that the requested waiver be granted.

Thomas G. Anderson
Assistant Chief Counsel

Office of Intellectual Property Law

Date: 7/24/9

Daniel D. Park
Patent Attorney

Office of Intellectual Property Law

Date: 7/24/97

Based upon the foregoing Statement of Considerations and representations in the attached waiver petition, it is determined that the interests of the United States and the general public will best be served by a waiver of patent rights of the scope described above, and therefore the waiver is granted. This waiver shall not apply to any modification or extension of the cooperative agreement, where through such modification or extension, the purpose, scope or cost of the cooperative agreement has been substantially altered.

**CONCURRENCE:** 

Pandit G. Patil,
Director, Office of Advanced
Automotive Technologies
EE-32

Date: 10/16/97

APPROVAL:

Paul A. Gottlieb
Assistant General Counsel
for Technology Transfer and
Intellectual Property

Date: 10-24-97

## WAIVER ACTION - ABSTRACT

W(I)-96-004 (CH-0894)

**REQUESTOR** 

**CONTRACT SCOPE OF WORK** 

**RATIONALE FOR DECISION** 

**DISPOSITION** 

GE Corporate Research & Development (GE-CRD) DE-FC07-96ID13406

Development of ultracapacitor/battery electronic interface

50% cost sharing